The resolution of OAB symptom after mesh surgery for pelvic organ prolapse.

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Aim

To examine the prevalence of overactive bladder (OAB) in women with pelvic organ prolapse(POP) and its improvement with mesh surgery.

Methods

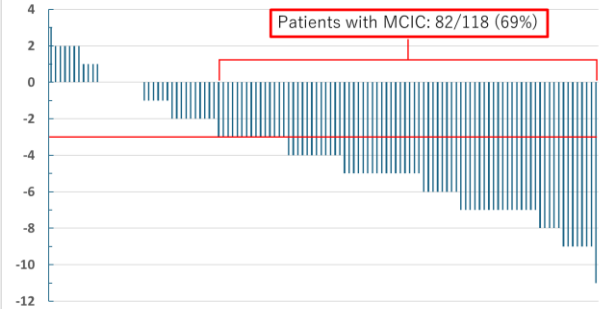
We retrospectively reviewed 226 patients who underwent mesh surgery for POP. OAB was determined by OABSS (patients with a Q3 score of 2 or more and a total score of 3 or more). The degree of bother was assessed with the 100mm-VAS scale (OABSS-VAS). The persistent urgency was defined as postoperative OABSS-Q3≥1.

Results

① Patient characteristics(n=226)

	Median (range) / n (%)
Age (years)	72.5 (42–87)
BMI (kg/m²)	24 (14–39)
Parity	2 (0–5)
History of hysterectomy	22%
POP-Q stage ≥3	Anterior: 87% / Apical: 38% / Posterior: 11%
OABSS before surgery	
OABSS Q1	1 (0–2)
OABSS Q2	1 (0–3)
OABSS Q3	2 (0–5)
OABSS Q4	1 (0–5)
total score	6 (0–14)
OABSS-VAS-QOL	73 (0–100)
Surgical procedure	TVM: 117 / Laparoscopic or robotic SC: 109
Preoperative OAB	118 (52%)

② Change in total OABSS score after surgery among patients who was OAB preoperatively (n=118)



MCIC*: minimal clinically important change :OABSS total score decreased by ≥ 3 points
*Gotoh et al. Urology. 2011 Oct;78(4):768-73.

③ The comparison of patients with and without urgency after surgery.

	Total(OAB preoperatively) (n=118)	Urgency Disappeared (n=75)	Urgency Persistent (n=43)	P value
Age, years, median (range)	74(60-87)	74(60-87)	73(61-87)	0.58
BMI, kg/m², median (range)	24.2(13.9-39.1)	24.1(13.9-31.6)	24.3(18.3-39.1)	0.77
Parity, n, median (range)	2(0-4)	2(0-4)	2(1-3)	0.96
History of hysterectomy, n(%)	21	14(19)	7(16)	0.80
POP-Q stage ≥3, n(%)				
anterior	104(88)	67(89)	37(86)	0.77
apical	44(37)	29(39)	15(35)	0.70
posterior	15(13)	11(15)	4(9)	0.57
Comorbidities, n(%)				
HT	62	43	29	0.55
Diabetes mellitus	19	10	9	0.44
Neurological disease	11	7(9.3)	4(9.3)	1.00
No. of comorbidities≥2, n(%)	21(18)	11(15)	10(23)	0.32
No. of comorbidities≥3, n(%)	2(1.7)	1(1.3)	1(2.3)	1.00
OABSS, median (range)				
OABSS Q1	1(0-2)	1(0-2)	1(0-2)	0.30
OABSS Q2	2(0-3)	2(0-3)	2(0-3)	0.22
OABSS Q3	3(2-5)	3(2-5)	4(2-5)	<0.0001
OABSS Q4	3(0-5)	2(0-5	3(1-5)	0.0011
total score	8(4-14)	8(4-14)	10(4-13)	<0.0001
OABSS-VAS-QOL, median (range)	89(5-100)	86(22-100)	90(5-100)	0.14
Surgical procedure, n(%)	TVM:60(51) RSC/LSC:58(49)	TVM:34(45) RSC/LSC:41(54)	TVM:26(60) RSC/LSC:17(40)	0.13
Concomitant TVT, n(%)	6(5.1)	6(8.0)	0(0.0)	0.08

④ Predictors of persistent urgency

	Univariate		Multivariate	
	OR(95%CI)	p	OR(95%CI)	p
Age	0.98(-0.08-5.50)	0.60	0.28(-0.10-0.05)	0.53
No. of comorbidities≥2	1.76(0.67-4.61)	0.25	0.57(-0.82-0.23)	0.27
OABSS before surgery				
Q3	2.31(1.52-3.66)	<0.0001	5.00(0.51-1.44)	<0.0001
Q4	1.71(1.25-2.41)	0.0005		-
total	1.42(1.20-1.71)	<0.0001	-	-
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Conclusions

OAB was found in 52% of patients with advanced POP. OAB remained in 36% of patients after mesh surgery. Persistent OAB may likely occur in patients with severe OAB symptoms preoperatively.